

VARIABLE BUOYANCY FLOAT ENGINE

Abstract of the Disclosure

An open and a closed system versions of a float tank actuated hydroelectric generator system is provided for generating work or electrical power. The closed system includes a fluid chamber, a float tank, a drain tank and plug, and a convertor for converting mechanical energy into work or electricity. Additionally, a piston, shaft, and recycling pool may be used. In its closed system form, in one version consistent with the invention, the float tank becomes negatively buoyant by allowing its inner chamber to flood or to become positively buoyant by draining its water ballast. The descent of the float tank pushes the piston into the shaft which force water through a hydroelectric generator. Water discharging from the generator is captured in a recycling pool which refills the shaft when the float tank ascends. The float tank is drained into a drain tank which in turn allows the float tank to ascend. The drain tank is recycled by first allowing it to descend over a plug, thus expelling its fluid back into the fluid chamber. The slidable plug then descends through the drain tank, drawing air back into the tank, whereby the drain tank and plug are enabled to ascend together. A plurality of valves control the flow of air and water in the system.